REMARKS

The examiner is thanked for the performance of a thorough search. Claims 1, 8, 13, 18, 23, 30, 31, and 32 have been amended. Claims 6, 7, 11, 12, 21, and 22 have been canceled. No claims have been added. Hence, Claims 1-5, 8-10, 13-20, and 23-32 are pending in the application. The amendments to the claims as indicated herein do not add any new matter to this application. Furthermore, amendments made to the claims as indicated herein have been made to exclusively improve readability and clarity of the claims and not for the purpose of overcoming alleged prior art.

Each issue raised in the Office Action mailed April 29, 2005 is addressed hereinafter.

I.   ISSUES NOT RELATING TO PRIOR ART--DRAWINGS

The Office Action objected to the drawings as containing handwritten matter. The Office Action stated that FIG. 1 and FIG. 2 should be labeled as "Prior Art." Corrected drawing sheets are submitted herewith. The corrected drawing sheets are believed to comply with all applicable rules, obviating the objection. Reconsideration is respectfully requested.

II.   ISSUES RELATING TO PRIOR ART--SPRUNK ET AL. IN VIEW OF GANESAN

Claims 1-32 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Sprunk et al. in view of Ganesan. The rejection is respectfully traversed.

The basis of a proper § 103(a) obviousness rejection must be one or more references or information that together provide all elements or steps of a claim, supported by a proper rationale to combine the references or information. If the proposed combination of references is missing an element or step of the claim, then the references do not render the claimed subject matter obvious.

The proposed combination of Sprunk et al. and Ganesan does not provide "a method of registering a non-configured network device in a telecommunications network," as recited in the preamble of the claims, or "receiving a message from a first non-configured network packet routing device," the first step of the body of the claims. The preamble of the claims is entitled to patentable weight because it recites a positive element or step that is given life and meaning by references in the body of the claim.

Fundamentally, Sprunk et al. and Ganesan fail to provide a method for registering a non-configured device in a network. The devices in a combination of Sprunk et al. and Ganesan are fully configured and known to the Kerberos KDC. Applicants' embodiments are concerned with the problem of how to deliver a long-lived configuration to CPE devices or other untrusted

network elements that appear in a network (as by installation at customer premises) and request service. In contrast, Sprunk et al. is concerned only with securing communications to cable modems that are **already trusted in the network**. Sprunk et al. states that a "CTA, for example 110a, can use two-way authentication with public key certificates to obtain a signaling controller Ticket from the KDC 150." **To do so, the CTA must have been pre-configured with a valid public key certificate.** Thus, Sprunk et al. does not deal with non-configured network devices.

The proposed combination of Sprunk et al. and Ganesan does not disclose, teach or suggest the step of "**receiving a request from a second network packet routing device to obtain a session key for secure communications between the second device and the first device, based on authenticating the shorter-lived symmetric key, wherein the request includes the shorter-lived symmetric key of the first device.**" The quoted step appears in all the independent claims. (In Claim 18 the step is phrased in terms of "generating" the same request.)

The Office Action states that the quoted step is provided in Sprunk et al. page 1, lines 12-20, and page 3, paragraph 0043. Sprunk et al. page 1, lines 12-20 has no such teaching, but Applicant believes this citation is an error and the Office Action intended to reference *Claim 1* of Sprunk et al. rather than page 1. But even claim 1 of Sprunk et al. does not provided the quoted step, which is expressed in the context of **peer routing devices contacting one another**, and a second packet routing device requesting a session key after receiving contact from a first packet routing device that wants to start peer-to-peer communication.

In stark contrast, the portions of Sprunk et al. cited by the Office Action teach a single cable modem contacting a Kerberos KDC to request a session key for communication with the KDC. Paragraph 0043 states that KDC 150 and CTAs 110a and 110b use Kerberos with the PKINIT extension. *See* FIG. 3 of Sprunk et al., in which the CTA sends the PKINIT request 310 and the KDC sends the PKINIT reply with a key.

For purposes only of clarification, the subject matter of canceled claim 6 and claim 7 has been incorporated into all the independent claims. All the independent claims therefore clarify that the claimed subject matter involves interaction with a **device registration service that can register and configure non-configured devices**.

Note that in one embodiment (Applicants' FIG. 6), the ultimate and penultimate steps of providing trusted information and providing information identifying the device registration service are implemented using a ticket-granting ticket (TGT). Sprunk et al. and Ganesan have no

teaching or suggestion to use a TGT for security purposes in connection with registering new, untrusted devices in a network.

The proposed combination of Sprunk et al. and Ganesan has no suggestion to adapt the secure telephony system of Sprunk et al. to the problem of registering non-configured devices in a network. The proposed combination, at most, would provide an Internet telephony communication system with symmetric keys. This is not what Applicants claim.

As per claim 3, the cited passage of Sprunk et al. does not involve one device requesting a key on behalf of another device. The cited passage only describes one CTA requesting a session key from the KDC for secure communications with the key center. It does not involve peer-to-peer session keys.

As per claims 5, 6 and 7 (now incorporated in all independent claims), 11, 21, 12, 22, 13, 23, 14, and 24, the references do not teach, disclose or suggest a trusted device registration service as claimed, which can register and configure non-configured devices.

Because Sprunk et al. does not provide for device registration, a trusted registration service, or the specifically claimed steps of interacting with a registration service to provide authentication data, accomplish authentication, obtain peer-to-peer session keys, and perform other actions in furtherance of registering non-trusted devices in a network, a combination of Sprunk et al. and Ganesan does not provide the claimed invention. All independent claims include the differentiating steps. Reconsideration of the independent claims is respectfully requested.

Each of the dependent claims not specifically identified above depends, directly or indirectly, from an independent claim that includes the particular features and steps identified above. Therefore, each of the dependent claims is allowable for the same reasons set forth above for the independent claims. Reconsideration of the dependent claims is respectfully requested.

III.   CONCLUSIONS & MISCELLANEOUS

For the reasons set forth above, all of the pending claims are now in condition for allowance. The Examiner is respectfully requested to contact the undersigned by telephone relating to any issue that would advance examination of the present application.

A petition for extension of time for one (1) month, and otherwise to the extent necessary to make this reply timely filed, is hereby made. If applicable, a law firm check for the petition for extension of time fee is enclosed herewith. If any applicable fee is missing or insufficient,

throughout the pendency of this application, the Commissioner is hereby authorized to any applicable fees and to credit any overpayments to our Deposit Account No. 50-1302.

Respectfully submitted,

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